

Half-Car IRI: (HCS)

This is a measure often confused as IRI, but is really a different value, typically in the range of 80% of the IRI value. This is not a direct measure of surface roughness like IRI, but a simulation of vehicle response that would be measure with 1 sensor in the middle of the axle.

The data is collected in the outside lane in 1 direction, with a high-speed profiler, and updated annually. The list has values for each mile (inches/mile).

The list includes Route, Begin Mile, End Mile, Length, IRI 1, IRI 2, IRI, & HCS (half-car IRI) for 1999, 2000, 2001, 2002, 2003, 2004 & 2005.

This has been the data used historically by UDOT for reporting pavement condition.

Currently used for UDOT scoreboard and Dashboard, & GAB34 reporting.

UDOT scoreboard goals are 90% of Interstate system Fair or better, 70% of Arterial system Fair or better, and 50% of Collector system Fair or better.

GASB34 goals are 50% of system Fair or better.

Half-Car HCS Ranges for Ride Condition & Ride Index

Ride Condition	Very Good	Good	Fair	Poor	Very Poor
Ride Index	100 to 90	90 to 70	70 to 50	50 to 30	30 to 0
RI Index	5 to 4.35	4.35 to 3.55	3.55 to 2.75	2.75 to 1.85	1.85 to 1
Asphalt	0 to 42	42 to 65	65 to 93	93 to 126	126 to 466
Concrete	0 to 79	79 to 103	103 to 130	130 to 163	163 to 326
Asphalt (pre 93)	0 to 45	45 to 70	70 to 100	100 to 135	135 to 500
Concrete (pre 93)	0 to 85	85 to 110	110 to 140	140 to 175	175 to 350